REMARKS

Reconsideration and allowance are respectfully requested.

Typographical errors are corrected in claims 14 and 19. In addition, in the Advisory action, the Examiner states "there is nothing in the claims to suggest the preamble limitation 'serially coupled battery' should be read into the body of the claim. Additionally, battery 234 in Fig. 2 of McDermott shows schematically multiple serially coupled batteries in a string." Accordingly, the claims are amended to recite in the body of the claims that the batteries between which a voltage imbalance is purposefully created are serially-coupled.

Claims 1-6, 8, 9, 12-16, and 18-19 stand rejected under 35 U.S.C. §102 as allegedly being anticipated by McDermott. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). McDermott fails to satisfy this rigorous standard.

The focus of McDermott is battery drainage prevention. When the vehicle charger is operating, both a starter battery and one or more auxiliary batteries, connected in parallel, are charged with the same voltage. When the vehicle is stopped, the starter battery is disconnected from the circuit in order to ascertain that the starter battery is not drained due to electrical loads connected to the circuit. But as a further feature, the system can monitor the discharge levels of the starter battery and the auxiliary batteries and may connect the auxiliary batteries to the starter battery in order to charge the latter if it is below a certain discharge level.

Claims 1 and 8 recite the use of an applied voltage imbalance between series-connected batteries to, for example, charge the batteries at different voltages. Similarly, claim 14 recites serially-coupled batteries. These claims also recite that the voltage distribution of the two serially-coupled batteries is controlled by controlling the potential at an intermediate connection point between the two serially-coupled batteries to purposefully create an applied voltage imbalance between the two serially-coupled batteries of the battery system.

McDermott's battery system has different banks that are connected in parallel. The sections of McDermott to which the Examiner refers describe a starter battery 102 and an auxiliary battery 104 which are connected in parallel. Although there may also be additional batteries 234 which may be a string of serially-connected batteries, the string 234 is connected in parallel with the starter battery 102 and the auxiliary battery 104. An electronics control module 108 is connected between the starter battery 102 and the auxiliary battery 104 and is able to connect and disconnect the starter battery 102 to the circuit with a switch 122 to prevent the starter battery 102 from being drained when power is being drawn from the auxiliary battery 104 during non-start events.

So McDermott teaches a battery system with a parallel battery circuit, which is confirmed by col. 4, lines 33-35: "Referring now to FIG. 1, multiple battery system 100 has starter battery 102 and auxiliary battery 104 connected by parallel circuit 106." Emphasis added. Figure 2 also shows the batteries parallel-connected.

The parallel-connected auxiliary battery 104 and starter battery 102 do not disclose detecting different battery voltages over at least two serially-coupled batteries, as recited in claim 1. Furthermore, the electronics control module 108/208 in McDermott does not control the voltage distribution of two serially-coupled batteries to purposefully create an applied voltage

imbalance between the two serially-coupled batteries in the string of additional batteries 234. The electronics control module 208 is not able to operate on a mid-point or some other intermediary point between the serially-connected batteries of the string 234, and therefore, is not able to detect or control the voltage distribution of different batteries in the string. IN contrast, claim 1 for example recites "controlling the voltage distribution of the two serially-coupled batteries by controlling the potential at an intermediate connection point between the two serially-coupled batteries to purposefully create an applied voltage imbalance between the two serially-coupled batteries of the battery system." McDermott only discloses performing an operation via the control module on batteries that are connected in parallel. McDermott does not detect different battery voltages over the serially-connected batteries of the string 234 or control the voltage distribution of the serially-connected batteries of the string 234 to purposefully create an applied voltage imbalance between the two batteries of the battery system.

McDermott fails to teach different batteries in a series-connection or coupling receiving an applied voltage level that is based on a measure voltage level of that battery. Because of McDermott's parallel battery circuit, McDermott cannot control the voltage distribution over the batteries and purposefully create an applied voltage imbalance between the batteries. In contrast, the claimed technology uses intermediate connection points between serially-coupled batteries to achieve faster recharge using a purposefully-created applied voltage imbalance between the batteries.

As described in the background of the instant application, if there is a variance of voltages between batteries of a string of serially-connected batteries, then this may lead to undercharging one or more of those batteries and overcharging one or more of those batteries and may also lead to slower charging. The claimed technology overcomes these problems by

controlling the voltage distribution over serially-coupled batteries to achieve faster recharge and eliminate imbalance in the string.

Lacking all of the features of the independent claims, the anticipation rejection should be withdrawn. Tamai is cited in combination with McDermott to show temperature sensing, a timer, and a discrete type DC/DC converter. But even if this were so, that does not remedy the deficiencies noted above with respect to McDermott.

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

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